

## UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	CATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,698 07/15/2003		/15/2003	Yoshiaki Oshima	1422-0595P	4920
2292	2292 7590 02/22/2005 EXAMINER				INER
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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.	Applicant(s)			
10/618,698	OSHIMA ET AL.			
Examiner	Art Unit	-		
Michael A Marcheschi	1755			

		Michael A	Marcheschi	1755					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply									
A SHO THE N - Exten after: - If the - If NO - Failur - Any n	DRTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Asked from the previous of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Box (6) MONTHS from the mailing date of this communication period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period to the prophyline has of the other period for reply with by statute, but the property of the prophyline of the pr	6(a). In no eve within the statu ill apply and will cause the appli	nt, however, may a reply be tim lory minimum of thirty (30) days I expire SIX (6) MONTHS from cation to become ABANDONE	nely filed s will be considered time the mailing date of this of D (35 U.S.C. § 133),	ly. ommunication.				
1)	Responsive to communication(s) filed on								
2a)	This action is FINAL. 2b)⊠ Thi		non-final.						
3)□	Since this application is in condition for allowa	nce except	for formal matters, pr	osecution as to th	ne merits is				
Dienoeiti	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims								
	Claim(s) 1-7 is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.								
	Claim(s) is/are allowed.								
	Claim(s) <u>1-7</u> is/are rejected.								
	Claim(s) is/are objected to.								
8) 🔲	Claim(s) are subject to restriction and/or	election re	quirement.						
Applicati	on Papers								
9)🖾 🗆	The specification is objected to by the Examiner								
10) 🔲 🛚	The drawing(s) filed on is/are: a)□ accep								
_	Applicant may not request that any objection to the		•	. ,					
11)[1	The proposed drawing correction filed on			ved by the Examin	er.				
400	If approved, corrected drawings are required in rep	•	ice action.						
	The oath or declaration is objected to by the Exa	aminer.							
	nder 35 U.S.C. §§ 119 and 120								
	Acknowledgment is made of a claim for foreign	pnonty uno	der 35 U.S.C. § 119(a	)-(d) or (t).					
, .	All b) Some * c) None of:								
	1. ☐ Certified copies of the priority documents			N- 40/040 00					
	2. Certified copies of the priority documents		• • • • • • • • • • • • • • • • • • • •	'					
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>									
14) 🗌 A	cknowledgment is made of a claim for domestic	priority un	der 35 U.S.C. § 119(e	e) (to a provisiona	l application).				
	☐ The translation of the foreign language products the control of the translation of the foreign language products the control of the translation of the translation of the translation of the translation of the foreign language products the translation of the translation								
Attachment	(s)								
2) D Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>7/1</u>	<u>15/03</u> .		(PTO-413) Paper No Patent Application (PT					

U.S. Patent and Trademark Office PTO-326 (Rev. 04-01)

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The disclosure is objected to because of the following informalities:

The disclosure is objected to because it does not contain the continuing data as required (applicants must also include the status of the parent application (patent number) in said continuing data). The examiner acknowledges that the transmittal included the continuing data, but the specification must be amended according to the new rules.

Appropriate correction is required.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grumbine et al.

Grumbine et al. teach in column 4, lines 54-55, column 6, line 50 and column 7, line 26column 8, line 40, a polishing composition for polishing a substrate comprising an abrasive (silica) having a primary particle size less than 400nm, an oxidizing agent and phosphoric acid.

The reference teaches a polishing composition comprising all of the claimed components because the reference uses phosphoric acid which is applicants claimed acid, thus it has the claimed pK1 value. With respect to the size of the abrasive, the values disclosed by the reference broadly encompass the claimed values making them obvious. With respect to the acid

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value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the reference abrasive content and size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohashi.

Ohashi teaches in the abstract, column 5, lines 5-20 and column 6, lines 19-20, a polishing composition for polishing a substrate comprising an abrasive (silica) having a primary particle size less than 500nm, an oxidizing agent and phosphonic acid.

The reference teaches a polishing composition comprising all of the claimed components because the reference uses phosphoric acid which is applicants claimed acid, thus it has the claimed pK1 value. With respect to the size of the abrasive, the values disclosed by the reference broadly encompass the claimed values making them obvious. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the reference abrasive content and size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mivata.

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Miyata teaches in sections [0018]-[0020], section [0035], and sections [0043]-[0044], a polishing composition for polishing a substrate comprising an abrasive (silica) having a primary particle size less than the secondary size of 500nm, an oxidizing agent and a phosphonic acid compound (phosphoric acid or an phosphonic acid component).

The reference teaches a polishing composition comprising all of the claimed components because the reference uses phosphoric acid which is applicants claimed acid, thus it has the claimed pK1 value. With respect to the size of the abrasive, the values disclosed by the reference broadly encompass the claimed values making them obvious. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the reference abrasive content and size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaufman et al.

Kaufman et al. teach in the abstract, column 5, line 25-column 6, line 33 and column 7,
lines 30-33, a polishing composition for polishing a substrate comprising an abrasive (silica)
having a primary particle size less than 400nm, an oxidizing agent and a phosphonic acid
compound. Other acid, such as, sulfuric acid and phosphoric acid can be added.

The reference teaches a polishing composition comprising all of the claimed components because the reference uses applicants claimed acids, thus it has the claimed pK1 value. With respect to the size of the abrasive, the values disclosed by the reference broadly encompass the

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claimed values making them obvious. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the reference abrasive content and size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. in view of Grumbine et al.

Lee et al. teach in column 4, line 66-column 5, line 62, a polishing composition for polishing a substrate comprising an abrasive (silica), an oxidizing agent and al least one of the claimed acids.

Although Lee et al. does not teach the size of the abrasive, this concept is obvious to the skilled artisan because Grumbine et al. teaches that silica abrasives for polishing are generally known to have the claimed size, thus making said size obvious. With this being obvious, the primary reference teaches a polishing composition comprising all of the claimed components because the reference uses the claimed acids, thus it has the claimed pK1 value. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the reference abrasive content and size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

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Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya et al. in view of Ohashi.

Tsuchiya et al. teach in column 7, line 10-column 8, line 50, a polishing composition for polishing a substrate comprising an abrasive (colloidal silica), an oxidizing agent and al least one of the claimed acids.

Although Tsuchiya et al. does not teach the size of the colloidal silica abrasive, this concept is obvious to the skilled artisan because Ohashi teaches that colloidal silica abrasives for polishing are generally known to have the claimed size, thus making said size obvious. With this being obvious, the primary reference teaches a polishing composition comprising all of the claimed components because the reference uses the claimed acids, thus it has the claimed pK1 value. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the reference abrasive content and size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/12740 in view of Grumbine et al.

The WO reference teaches in the abstract, page 5, lines 3-14 and page 10, lines 5-13, a polishing composition for polishing a substrate comprising an abrasive (silica), an oxidizing agent and all least one of the claimed acids.

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Although the WO reference does not teach the size of the abrasive, this concept is obvious to the skilled artisan because Grumbine et al. teaches that silica abrasives for polishing are generally known to have the claimed size, thus making said size obvious. With this being obvious, the primary reference teaches a polishing composition comprising all of the claimed components because the reference uses the claimed acids, thus it has the claimed pK1 value. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the reference abrasive content and size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 7-233485.

The JP reference teaches in the abstract, a polishing composition for polishing a substrate comprising an abrasive, an oxidizing agent and al least one of the claimed acids.

The reference teaches a polishing composition comprising all of the claimed components because the reference uses applicants claimed acids, thus it has the claimed pK1 value. With respect to the size of the abrasive, the values disclosed by the reference broadly encompass the claimed values making them obvious. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the reference abrasive content and size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

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The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington. 418 F.2d 528, 163 USPO 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 5 and 13-16 of copending Application No. 10/726,581. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reduction to practice of the claims according to the copending application would render obvious the instant claims. The copending claims define polishing compositions which contain all of the instantly claimed components because the copending claims use the claimed acids, thus it has the claimed pK1 value. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the copending claims size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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Claims 4-7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over all the claims of copending Application No. 10/857,841. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reduction to practice of the claims according to the copending application would render obvious the instant claims. The copending claims define polishing compositions which contain all of the instantly claimed components and values.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over all the claims of copending Application No. 10/727,571. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reduction to practice of the claims according to the copending application would render obvious the instant claims. The copending claims define polishing compositions which contain all of the instantly claimed components because the copending claims use the claimed acids, thus it has the claimed pK1 value. In addition, the copending specification defines what is meant by acid. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the copending claims size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

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This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims all the claims of copending Application No. 10/753,460. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reduction to practice of the claims according to the copending application would render obvious the instant claims. The copending claims define polishing compositions which contain all of the instantly claimed components because the copending claims use the claimed acids, thus it has the claimed pK1 value. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the copending claims size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-7 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over all the claims of U.S. Patent No. 6,620,216. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reduction to practice of the claims according to the copending application would render obvious

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the instant claims. The patent claims define polishing compositions which contain all of the instantly claimed components and values. Although the instant case is identified as a divisional, the instant claims were never restricted, thus this rejection is proper.

Claims 1-7 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over all the claims of U.S. Patent No. 6,818,031. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reduction to practice of the claims according to the copending application would render obvious the instant claims. The patented claims define polishing compositions which contain all of the instantly claimed components because the patented claims use the claimed acid, thus it has the claimed pK1 value. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the patented claims size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

In view of the teachings as set forth above, it is the examiners position that the references reasonably teach or suggest the limitations of the rejected claims.

"A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. In re Opprecht 12 USPQ 2d 1235, 1236 (CAFC 1989); In re Bode USPQ 12; In re Lamberti 192 USPQ 278; In re Bozek 163 USPQ 545, 549 (CCPA 1969); In re Van Mater 144 USPQ 421; In re Jacoby 135 USPQ 317; In re

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LeGrice 133 USPQ 365; In re Preda 159 USPQ 342 (CCPA 1968)". In addition, "A reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See In re Van Marter, 144 USPQ 421.

"A generic disclosure renders a claimed species prima facie obvious. Ex parte

George 21 USPQ 2d 1057, 1060 (BPAI 1991); In re Woodruff 16 USPQ 2d 1934; Merk & Co.

v. Biocraft Lab. Inc. 10 USPQ 2d 1843 (Fed. Cir. 1983); In re Susi 169 USPQ 423 (CCPA 1971)".

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549; *In re Wertheim* 191 USPQ 90 (CCPA 1976)\*.

Evidence of unexpected results must be clear and convincing. In re Lohr 137 USPQ 548.

Evidence of unexpected results must be commensurate in scope with the subject matter claimed.

In re Linder 173 USPQ 356.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L Bell can be reached on (571) 272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll\_free).

Z/17/05 MM Michael A Marchesehi